

WAVELENGTH DISCRIMINATED IMAGE DITHERING

ABSTRACT

5 A method and system for providing a dithered image is provided. In one
embodiment, a projector system for providing a dithered image includes a light source
comprising a first and a second light emitting diode (LED). The first LED is operable
to transmit a first light beam at a first peak wavelength. The second LED is operable
to transmit a second light beam at a second peak wavelength. The first peak
wavelength is disparate from the second peak wavelength. A digital micromirror
10 device (DMD) is operable to receive the first beam and the second beam and
selectively pass a first portion of the first beam and a second portion of the second
beam along a projection path. A dichroic reflector operable to receive the first portion
and the second portion, passively pass the first portion along the projection path, and
substantially reflect the second portion within a wavelength range. An optical mirror
15 operable to receive the substantially reflected second portion and reflect the
substantially reflected second portion along an offset path.